Position Location

RF Hardware

TECH3300GPS - Based on 7GP

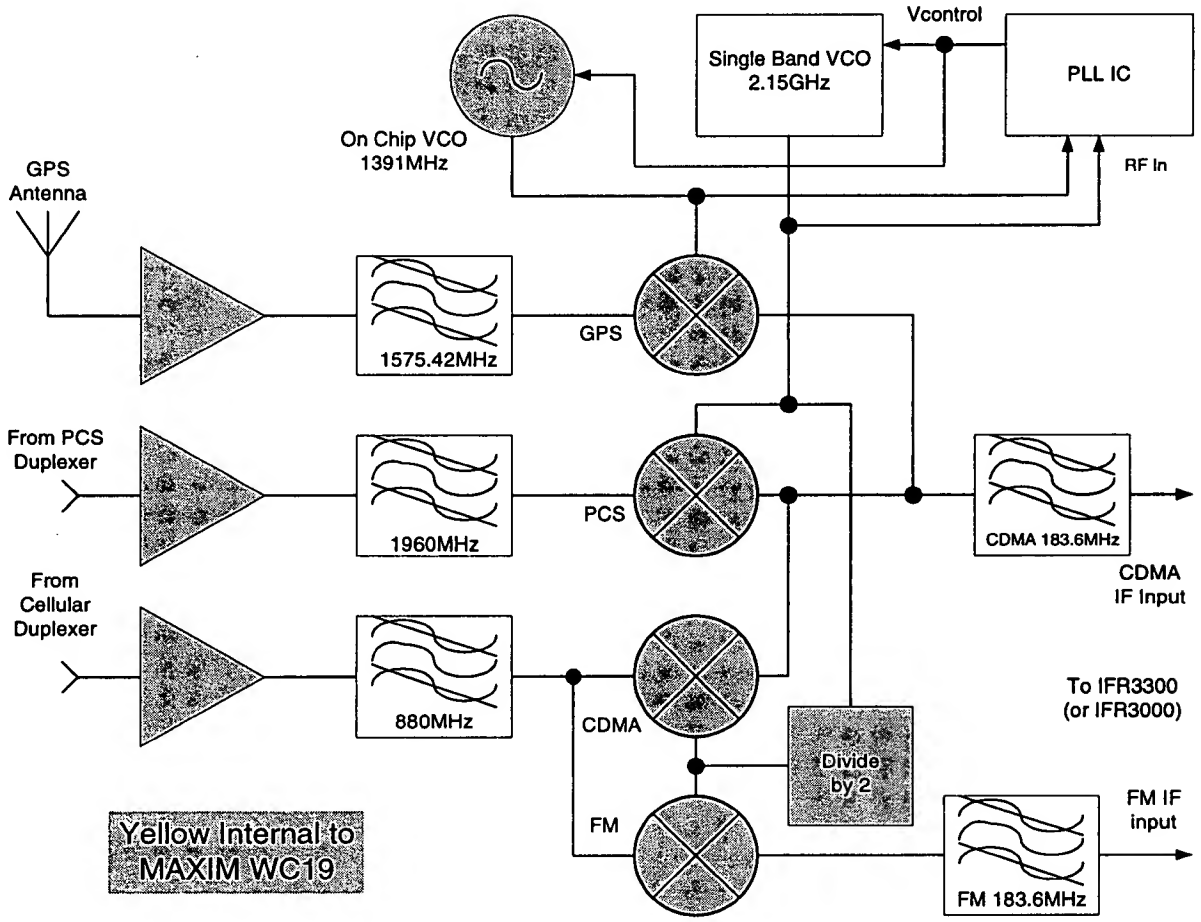
Common IF Frequency Plan

- Uses a fixed receive IF of 183.6MHz for all modes and bands including GPS
- Requires high side LO injection for Cellular and PCS bands
- Requires low side LO injection for GPS reception on 1575.42MHz
- Current phone designs use a dual band oscillator for Cellular and PCS
  - Adding GPS functionality to the phone would normally involve a 3rd UHF_LO and thus add directly to the cost.

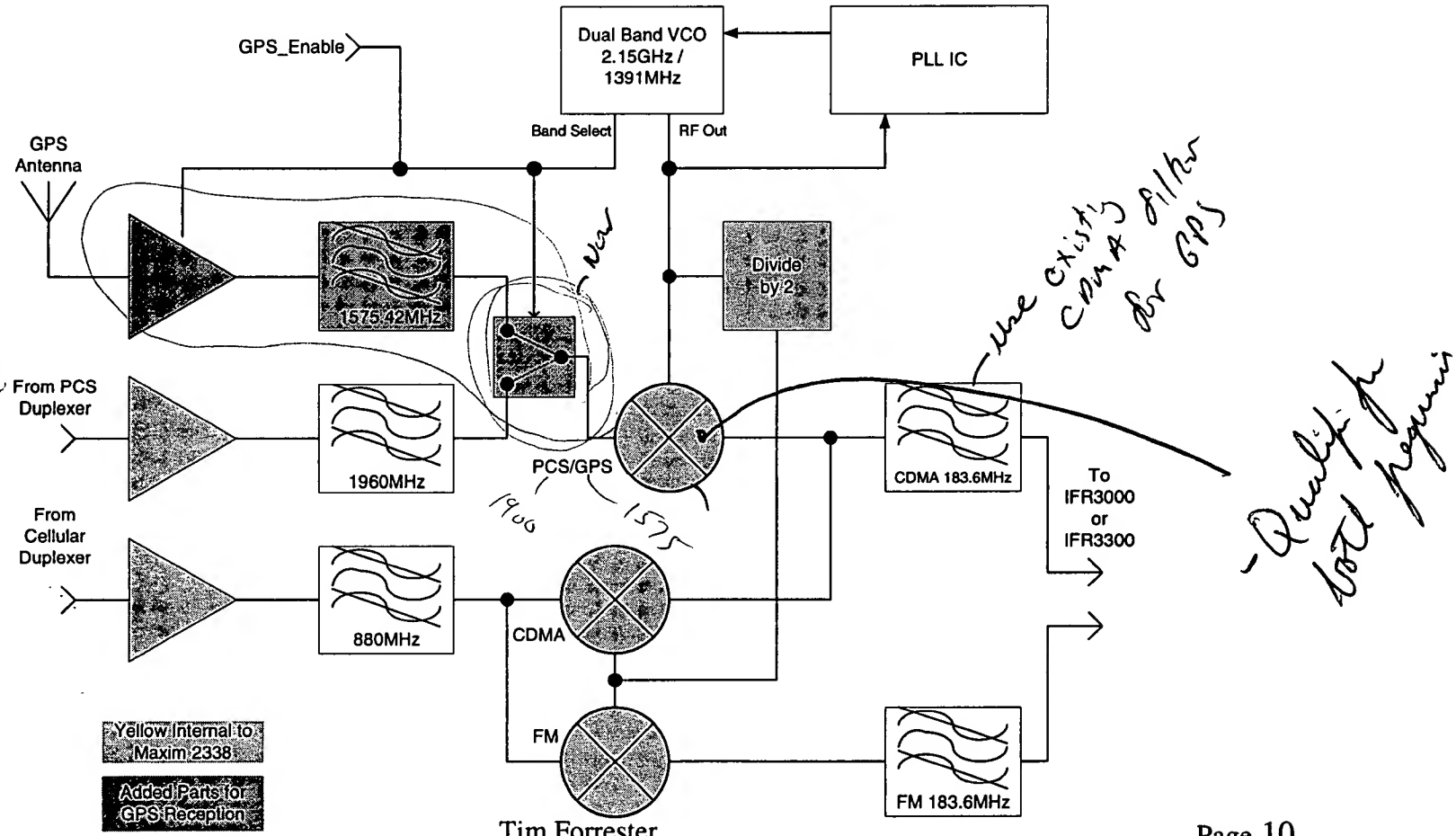
Common IF Frequency Plan

- To avoid the expense of a 3rd LO Technology has demonstrated that it is feasible to use a /2 function to generate the Cellular LO from the PCS LO signal.
  - Specifically the MAXIM 2338 has undergone extensive tests to verify its conformance (Complete data to be posted on SEEK)
- Thus only a dual band VCO is required to cover Cell / PCS and GPS operation
  - This VCO module has been developed in conjunction with FMD is undergoing evaluation - presently we have 300 samples to hand.

Maxim WC19 Solution using IFR3000 or IFR3300



Maxim 2338 Hybrid Solution using IFR3000 or IFR3300



How's it working ?

- Stop Press !
  - Thanks to the outstanding work of the software team, TECH3300GPS is successfully making calls and receiving GPS test signals.
  - TECH3300GPS will be under going further evaluation in QCT's test facility next week.
  - Shortly thereafter fields trials and data analysis